

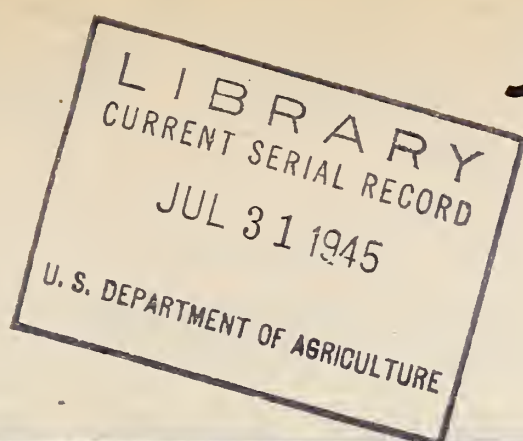
## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



72  
8M34  
p2

July 1945



# *Marketing activities*

**U.S. DEPARTMENT OF AGRICULTURE**  
**Office of Marketing Services**

The War Food Administration was abolished by executive order effective at the close of business June 30, 1945, after this issue was prepared. The functions of the former WFA are now a part of the U. S. Department of Agriculture.

IN THIS ISSUE:

NAVAL STORES AND OMS

By V. E. Grotlisch, Chief, Naval Stores Sections, Standards and Futures Division, Cotton and Fiber Branch . . . . . Page 3

The Naval Stores Act provides control over interstate commerce in spirits of turpentine and rosin, prevents the sale of adulterated, misbranded, or misgraded turpentine and rosin and the use of fraudulent practices in their sale. The act also provides for analysis, classification, or grading by the U. S. Department of Agriculture and establishes official standards for naval stores.

THE MARKET NEWS SERVICE . . . . . Page 9

The Market News Service gives farmers and others up-to-the minute information about the principal farm-product markets. It answers such questions as: How large is the supply? How great is the demand? Exactly what are the prevailing prices? And it helps the farmer get a fair price for his products.

THE WARTIME DAIRY PROGRAM

By Tom G. Stitts, Chief, Dairy and Poultry Branch . . . . . Page 18

The last 5 years have seen some extraordinary increases in production and changes in utilization.

28-HOUR LAW

By Charles R. Barnett, Chief, 28-Hour Enforcement Section, Transportation Rates and Services Division, Marketing Facilities Branch . . . . . Page 23

When beef or pork animals have to spend too much time in a crowded railroad car without water, feed, or rest, it's bad in more ways than one: On the animal, the owner, and the public.



Address all inquiries to  
Elbert O. Umsted  
Editor, Marketing Activities  
U. S. Department of Agriculture  
Washington 25, D. C.

Material in Marketing Activities  
may be reprinted without special  
permission.  
  
Issued monthly. Vol. 8, No. 7



# Naval Stores and OMS

. . . . V. E. Grotlisch, Chief, Naval Stores Section,  
Standards and Futures Division, Cotton and Fiber Branch

Before Federal regulation of naval stores was begun, adulterated turpentine was being sold in many consuming centers. This was largely the fault of northern distributors. On the other hand, some Southern producers and dealers were misbranding and misgrading rosin, and it was evident that official standards for this commodity needed to be set up, and that the traffic in naval stores needed to be regulated, if deception was to be prevented.

It took a long time to organize and harmonize the interests of both producers and consumers and to formulate provisions of an act to regulate the naval stores industry. Producers wanted an act covering turpentine but not rosin; consumers were more interested in getting rosin grades standardized and rosin properly graded.

## The Act

An act was eventually passed in 1923. Regulations, of which the latest revision was issued in 1941, interpret the scope of the provisions of the act.

The Naval Stores Act provides control over interstate commerce in spirits of turpentine and rosin. It prevents the sale of adulterated, misbranded, or misgraded turpentine and rosin, and the use of fraudulent practices in the sale of these naval stores. Provisions of the act provide for inspection service under which interested persons may have products analyzed, classified, or graded, on request, by the Department of Agriculture. The act establishes official standards for naval stores and makes available duplicates or "types" of the official rosin standards for use in grading rosin.

Under the regulatory provisions of the act, each of the four different kinds of spirits of turpentine must be labeled, sold, and shipped under or by reference to its own standard of identity, as follows: Gum spirits of turpentine, steam-distilled wood turpentine, destructively distilled wood turpentine, or sulphate wood turpentine, depending on the process by which it was produced. No mixture of two or more kinds of turpentine may be sold in interstate commerce, since no standards have been set up for such a product.

Rosin must be classified as "gum rosin" or "wood rosin," and also by one of the grades specified in the act, or subsequently by the Secretary of Agriculture, if a suitable grade has not been prescribed by the act. Restrictions are placed on the use of the words "turpentine"

and "rosin," and they may be used to describe only the genuine product. Use of the word "turpentine" or similar names to describe substitute paint thinners consisting wholly or partly of mineral oil is prohibited. False or misleading wording of labels or invoices, or deceitful practice including slack filling of containers of turpentine, are also prohibited.

Rosin grades range from X, the highest (a pale yellow) through gradations of color to D, the next to the lowest (a very dark red), B, the lowest grade, is almost black. A grade designated "FF" has been established for dark-red wood rosins somewhat similar in color to D gum rosin.

### Standards

Government color standards for rosin consist of combinations of colored glasses made up by cementing together with Canada balsam 20-mm.-square plates of glass, selected on the basis of spectrophotometric transmission data to give combinations which duplicate the color and transmission characteristics of rosin. A piece of absolutely colorless glass is cemented to the colored glass plates to give a finished combination approximately seven-eighths of an inch thick in the direction through which the standard is viewed. The assembled glass combination is finally cemented into a German silver (nickel brass) protective sleeve on which is engraved the official U. S. rosin standard grade.

A master set of the standards is held at the Office of Marketing Services, which administers the act. Duplicate sets will be lent to qualified persons. Persons or firms desiring the standards for private use in grading their own rosin production or purchases must post a cash security of \$100, to be returned when the standards are surrendered. The standards are generally supplied in sets of 12 grades from X to D inclusive. Separate standards may be had for FF grade. No standard is needed for B grade, since any rosin which is darker in color than the D standard is graded B.

The grade of rosin is determined by comparing a suitable sample with the appropriate standard types. Each barrel must be sampled individually, since not all the barrels even from the same charge or distillation may be exactly alike in color. Most rosin barrels today have a removable sampling device placed in position through an opening in the stave or side wall of the drum. Formerly, the method of sampling was to remove a top layer of the solidified rosin to a depth of at least 4 inches and to spike out a lump about the size of a double fist, from which the inspector cut a cube-shaped grade sample seven-eighths of an inch on the side.

Producers and dealers in rosin may have their products classified and graded by expert Federal graders, available from the Office of



Marketing Services. The grading for gum rosin producers is done both at the stills where the rosin is made and at marketing-point concentration yards. Still inspections may be made weekly, biweekly, or monthly, depending on location and the quantity of rosin produced from day to day. The season extends from early spring to late-December or the middle of January, with the peak in June, July, August, and September.

The purchaser of a quantity of turpentine ready for shipment or received on consignment may request the Department to issue a certificate of approval of the material so that he can be sure it is up to grade. If no qualified Government inspector is available, the person making the request may submit samples of the material, in which case, a written report is given covering the quality of the samples submitted. Fees are charged for inspection service, with additional charges if any extra time or travel is involved.

To be of standard quality, and meet the requirements of the act, turpentine must agree with the description of source and method of production indicated by the label and invoice, as prescribed by the act and its regulations. It must also conform to the generally accepted specifications for quality of turpentine that suit the ordinary purpose for which--or processes in which--the article is generally used.

During 1944, OMS inspectors of naval stores inspected, graded, and classified 239,456 drums of gum rosin and 2,561 drums or barrels of gum turpentine. These inspections were covered by 10,875 Federal inspection certificates on rosin, and 201 on turpentine.

For lend-lease purchases there were inspections, analyses, and certifications on a large number of lots of gum turpentine, steam-distilled wood turpentine, wood rosin, alpha pinene, pine oil, pine tar, tall oil, and rosin oil aggregating 7,443 drums. Laboratory analyses were made of 13 samples before issuance to vendors of certificates to determine compliance with specifications.

#### Labor Shortage

During the war the biggest problem in connection with the naval stores production has been the labor shortage. Until recently the naval stores industry did not have a priority for labor, with the result that most of the local labor not drafted went into the shipyards. Last year, production was at the lowest point in industry history, and it probably will be no higher this year. Rosin is scarce. The turpentine situation is more satisfactory because of the big carry-over from previous years.

These materials have been urgently needed during the war on account of increased requirements for structures of all kinds, ships, guns, and many kinds of paper products. Large quantities of rosin have been used as substitutes for fats in making soap. For a while the quantities of



vegetable and animal fats available for soap-making were reduced, and WPB issued instructions requiring manufacturers to substitute rosin in place of these fats for soap-making. Today rosin is more critical than fats, and the supply must be carefully conserved.

Meanwhile OMS is making progress in the further standardization of naval stores. A commercial grade of turpentine long known as Waterwhite was defined for the first time during the past year. Working standards for the two commercial grades known as Waterwhite and Standard have been prepared and supplied to the field inspectors of naval stores.

In collaboration with the Committee on Naval Stores of the American Society for Testing Materials, methods of analysis and tests of many naval stores products were studied. Also studied were (1) methods for determining the total terpene alcohol content of pine oil, (2) methods for determining the acid and saponification numbers of dark-colored rosins, and (3) methods for determining the unsaponifiable matter in rosin. Other general analytical and test methods included those applicable to pine oil, tall oil, dipentene, pine tars, and rosin oil. Methods covering the first three commodities have been developed to the point where they have been adopted as tentative standard methods of the American Society for Testing Materials.

### Long History

Naval stores are of ancient origin. Oils and pitches were manufactured from the gum or resin of coniferous trees on the shores of the eastern Mediterranean many centuries before the Christian era. Rosin, pine oil, pine tar, pine pitch, and turpentine were important items in the supplies carried by Colonial sailing vessels. Crude gum from the pines of Virginia and North Carolina was boiled in iron retorts and the pitchy residue when strained was used for caulking the seams of wooden ships.

Today the principal sources of the world's supply of turpentine and rosin are the forests of southern longleaf pine and slash pine of the South Atlantic and Gulf States, and cut-over forest lands with millions of pine stumps. Crude gum from living pines has always been the most important source of supply for naval stores, but large quantities of turpentine and rosin also are recovered from pitchy stumps and knots left after lumbering operations, a much later development.

The gum or oleoresin is obtained from the pine trees by "chipping" the tree and collecting the gum exuding from the wounds made in the sapwood. The gum is hauled to stills and distilled in the presence of water by means of which spirits of turpentine is removed by volatilization. The molten mass remaining in the still is the rosin, which must then be screened and filtered to remove chips, pine straw, cones, dirt, and insects.



Gum products today constitute about 55 percent of the production of naval stores. The wood naval stores industry supplies the remainder. This industry has three divisions--the steam-solvent group, the destructive-distillation group, and the sulphate group, the first being the most important.

The raw material used by the steam-solvent and destructive-distillation groups consist of "lightwood" knots from felled trees and old resinous pine stumps. After exposure for 10 years or more the resinous content of the pine stumps increases materially. Under the steam process the stumps and knots are ground and shredded, then treated by live steam, which releases the turpentine and pine oil from the wood. After these are removed, hot gasoline is pumped through the retort. This dissolves out the resin remaining in the wood. After a final processing, the residue is the dark-red rosin called FF wood rosin. By further refining, pale-yellow wood rosins may be obtained.

The destructive distillation subjects pine knots and stumpwood, cut and split to cordwood size, to a baking or carbonization that removes the turpentine and pine oils by condensation. In the bottom of the retort is left a heavy black liquid that cools to a soft solid called pine-tar pitch. The turpentine and pine oils are further refined by redistillation.

Turpentine is also recovered as a byproduct in the manufacture of paper by the sulphate process. Freshly cut pine wood without the bark is used. After being ground it is cooked with chemicals to form pulp or cellulose. A kind of spirits of turpentine is obtained from the condensed vapors released from the digesters which, after redistillation and refining, become the sulphate wood turpentine of commerce. The rosin in the wood is converted into a dark-brown soap. After chemical treatment, a product called tall oil is obtained. This is used in insecticides, sheep dips, soap, and in cheap adhesive and insulating compositions.

#### Essential Uses

Naval stores have many essential uses. Rosin is used principally as a sizing or water-repellent in paper-making. Rosin makes wrapping paper and fiberboard boxes strong and water-resistant, acting as a binder for the cellulose fibers.

In the manufacture of soap, abietic acid, when combined with an alkali like caustic soda, produces a resinate or soap. Yellow laundry soap contains about 50 percent of such rosin soap, and many of the cheaper grades of toilet soap and most industrial soaps contain some saponified rosin.

The manufacture of varnishes and enamels requires large quantities of rosin. The rosin, or the synthetic resins produced from it, are cooked and combined with linseed oil or tung oil to produce varnish.

Rosin is used in making chemical and pharmaceutical preparations, such as body plasters and adhesive tape. Heated to high temperatures, rosin is converted to rosin oil used in making printing ink and axle grease. It is used in the manufacture of linoleum and other floor coverings, adhesive and plastic preparations, foundry core oils, shoe polish, matches, insulating materials, insecticides, and for many other purposes.

Turpentine is necessary for thinning paints and varnishes. Today practically all the camphor produced in this country is produced synthetically from alpha-pinene, the principal chemical compound in turpentine. Camphor is an important item of medicine and an ingredient in celluloid and some forms of smokeless powder. Formerly, camphor was obtainable only from the camphor tree of Formosa, and the Japanese Government had a monopoly on the camphor supply. Turpentine is used in paste shoe polish, insecticides, printing inks, adhesives and plastics, and certain medicinal preparations. It is also a well-known home remedy.



#### CHEDDAR CHEESE SET-ASIDE REDUCED

The set-aside for Government purchase of Cheddar cheese produced during July will be 65 percent, instead of the 70 percent quota prevailing in June, WFA has announced.

This reduction reflects no decrease in governmental requirements, but accords with WFA's policy of adjusting quotas on the basis of monthly changes in production so as to provide reasonably steady supplies for U. S. civilians. Over-all Government requirements are, in fact, higher than at any previous time.

Supplies of Cheddar cheese for civilians during July are expected to be nearly 36 million pounds. This is about the same quantity as has been available during recent months. In addition, supplies of other types of cheese (Swiss, Limburger, brick, Muenster, etc.) may be somewhat greater than in previous months because production restrictions for these cheeses have been suspended until July 15, 1945.



WFA has increased, from 2,100 bushels to 3,000 bushels, the quantities of malt which small brewers may use during each 3-month quota period. The increase is provided in amendment 10 to WFO 66, and was effective June 1, 1945.

Purpose of the provision was to alleviate hardship in the case of small plants that could not operate if they were under the same limitations as larger brewers. The additional malt involved will not be enough to affect the malt supply situation materially.



# The Market News Service

Reliable market information is a practical necessity in the operations and plans of those who produce, buy, or sell agricultural commodities. Without it, the farmers of the country cannot hope to obtain the best returns for their efforts and investments. And market news is also of increasing value to homemakers.

The Federal Market News Service has grown from a humble beginning in 1915--when the first report was issued on strawberries at Hammond, La.--to become an indispensable factor in the American system of marketing farm products. Today daily reports are issued by 71 year-round offices and about 45 temporary offices located in the major producing and distributing centers. The service covers the movement, market supplies, quality, and price trends and quotations on livestock, meats, wool, fruits, vegetables, dairy and poultry products, grain, hay, seeds, feedstuffs, cotton and cottonseed, tobacco, rice, honey, peanuts, and other products.

Before the service was established and developed on a Nation-wide scale, only a relatively few producers could get the needed information in time for it to be of practical value--if they could get it at all. And all too frequently the information that did reach them was colored to the advantage of unscrupulous persons who were seeking to profit by it.

## Accurate and Unbiased

Much progress has been made in the development of the service. For example, it is now possible--and within an almost fantastically short time--for the poultry farmer in New England, the southern fruit and vegetable grower, or the Corn Belt cattle feeder to get accurate, unbiased information which is essential to the effective and profitable marketing of his products. For the Market News Service uses extensively all the modern means of promptly transmitting the information it collects.

Securing the information which goes into these market reports is frequently a complex job. Reporters on the markets interview buyers and sellers during trading hours and also inspect records made available by these trade interests. They observe actual transactions and make an appraisal of the quality, grade, or condition of the commodities, since these are important factors in determining whether the established prices are actually higher, lower, or unchanged from previous trading sessions. Such appraisals can be made because the reporters are commodity specialists. Information on shipments from producing centers and arrivals at terminal markets is received from railroads and boat

lines. Reports of truck unloads at certain large cities, warehousemen's reports of stocks in storage are collected and numerous contacts with other groups are made for essential information.

Information received at any one market is quickly made available to the public by means of radio, press, telephone, mail, and bulletin board. It is further distributed widely over leased and commercial telegraph wires to all important trading centers, through trade and farm publications, commercial and financial institutions, and other agencies. Daily market reports are mailed to thousands of interested persons. This service is supplied on request. Most newspapers--particularly in farming areas--carry market news as a regular feature.

### Radio

The radio plays an increasingly important role in the prompt dissemination of market news. The number of radio stations carrying such reports was 3 in 1921, 110 in 1929, and today is approximately 500--well over half the radio stations in the country. A number of stations supply facilities that enable the reporters to broadcast direct from the market. Some of the stations provide 3 to 5 scheduled broadcasts a day in order that producers in the territory they serve may be kept fully and promptly informed about trends and other important changes in marketing conditions.

### In Demand

It would be difficult if not impossible to measure the value of market news in terms of dollars because market news not only assists the producer in getting a fair return for his products but it plays an important part in getting effective distribution of agricultural products. The demand for market news is probably the best yardstick by which its value can be measured, and the demand is not only greater than ever before but is growing steadily. Producers today no longer are at great disadvantage when they compete with strong commercial organizations able to obtain information through far-flung trade connections. The distribution of information by the service discourages the dissemination of fictitious and misleading market information. The record of trading activities provides a continuous story for use by marketing specialists and economists in making studies and analyses of production, demand, price, and distribution, and it aids economic research aimed at improving marketing methods.

In addition, the Market News Service is used by various Government agencies, and by persons and organizations outside Government, to supply background information necessary in carrying on wartime programs dealing with price supports and ceilings, rationing, food allocations, set-aside orders, and, in fact, any other program concerned with the marketing or distributing of agricultural products.



## Cotton

Cotton price quotations and timely information about marketing conditions have been compiled and released for more than 25 years. The need for such authentic price and market information, however, was recognized long before the service was authorized under an amendment to the Cotton Futures Act in 1919.

Daily price quotations cover the principal cotton markets. Weekly and daily reviews of cotton market conditions are released from Washington and from Atlanta, Memphis, Dallas, and Bakersfield, Calif. The various reports are distributed directly by mail and indirectly through the press. The radio also is used extensively, to keep farmers and others currently informed of changes occurring on the major cotton markets.

Market news work and cotton classification are closely coordinated. In recent years special arrangements have been made to help farmers obtain local market prices through representatives selected by organized producer groups. Such a service for farmers, when coupled with official cotton classification, greatly strengthens their bargaining power. It encourages production of better-quality cotton and improves the efficiency of the cotton-marketing system generally.

Market reports issued at Atlanta, Memphis, and Dallas show prices and grades of cottonseed sold in the various counties. These reports include current prices. Weekly reports are also released from Washington on cotton linters, most of which is used directly in manufacturing cellulose for war purposes. Also issued from Washington is a monthly report on cotton price statistics.

## Dairy and Poultry Products

Market News about dairy and poultry products began in 1918. Offices are maintained at New York, Chicago, Philadelphia, Boston, San Francisco, Los Angeles, Seattle, Portland, Oreg., and Washington, D. C. Market reports are issued also at Baltimore, Pittsburgh, Denver, New Orleans, and Ft. Worth in cooperation with Market News offices that report other agricultural commodities. The service is also operated in cooperation with the State departments of agriculture in Michigan, California, New York, Virginia, and Alabama.

Types of market information available include market receipts, cold-storage movements and stocks, current trading stocks on dealers' floors, movements into retail channels, market comments and prices. Reports showing terminal market receipts are in such detail as to make it possible to study sources of supplies for individual markets, occasional shifts resulting from changes in market supplies, direct buying, and adjustments in merchandising methods and outlets. These data also show the shifts from rail to truck transportation, or the reverse.



In addition to the data on terminal market receipts, information is also collected and distributed on receipts at country packing plants in different parts of the country where eggs and poultry are handled, and at egg auctions and producers' assembling plants. Such data show marketings and supplies available for trading, and to some extent indicate current production, particularly of eggs.

The quantities of dairy and poultry products arriving at a particular market may be used for local consumption, storage, or shipping to other markets. Therefore information on receipts alone does not give farmers and others a complete picture of the supply of the various items that may be moving currently into local consumption. Accordingly, information in addition to the foregoing is made available on movements into retail channels. Such information, collected and distributed regularly, provides the basis for calculating the trade output of a market or group of markets. Daily and weekly reports of cold-storage stocks in related markets also provide a basis for estimating total U. S. stocks.

Information about the quantities of butter and eggs moving regularly into retail channels in key markets is compiled from reports received from representative groups of retail distributors. Since retail distributors carry stocks for short periods, reports of retail sales closely measure the rate at which these products move into consumption.

In the past, the most widely used basis of reporting prices was the use of wholesale selling prices in terminal markets. Owing to changes in marketing practices during recent years--such as the increase in direct marketing (especially to retail distributors by cooperative associations), direct buying in the country by large retail distributors, mergers on the markets resulting from large-scale organization--the volume of business through wholesale channels has been declining. Market news methods likewise have been adjusted to meet current needs of industry, which meant a shifting of emphasis in some markets from the reporting of wholesale selling prices to the reporting of prices received by shippers.

### Fruits and Vegetables

The Market News Service on fruits and vegetables has served growers and shippers and the fruit and vegetable industry since March 1915. Here as with market news work on other commodities, extensive use is made of the Department's teletype circuits. These circuits link the major terminal markets of the country. Also linked in are many of the major producing areas. This provides a rapid interchange of information on available supplies, demand, movement, and prices. Other major producing areas receive and give the latest market information by means of commercial telegraph.

Reports showing daily carlot shipments, rail (and in some cases truck) receipts, demand, market trends, and prices in the terminal



markets as well as in major producing areas are compiled and disseminated by the Market News offices in both terminal markets and shipping areas. The information is distributed by mail, wire, telephone, press, and radio, to growers, shippers, railroads, and receivers. It is also made available to every segment of the distributive trade and to governmental, educational, and research institutions. In New York and Cleveland special broadcasts, made by the Market News men around 6:30 each morning, provide growers and shippers with a summary of market activities and trading up to that time. In some other offices market news is broadcast later in the day. At several markets special broadcasts are made which include information of interest to consumers. Permanent offices are maintained in 21 of the major receiving markets, with seasonal offices operating from 1 to 8 months in about 40 of the principal producing areas.

Weekly reports on peanuts and a semimonthly honey report are issued from Washington. Altogether, approximately 10 million daily reports are mailed each year to about 60,000 growers, shippers, wholesalers, and others.

In 19 States cooperative agreements, in which the States pay a part of the cost of the service, permit a broader service than could be maintained with Federal funds alone.

#### Grain, Feed, and Hay

The grain, feed, and hay Market News Service was started in 1916 with biweekly reports which included information on supply sources for grain and hay, stocks in dealers' hands, market receipts, shipments, and prices.

Market news on grain is now available at frequent intervals during the day at the principal grain markets. But from the standpoint of farmers, who need to know the underlying market factors that determine and will determine the crop prices, the Market News weekly review of the grain market is especially important. The weekly report also includes information on foreign market conditions in the commodity.

On the west coast, where grain is not stored on the farm but is stored and sold largely at the public warehouse, a more localized type of service is supplied. Most newspapers include grain quotations regularly on their market pages, and radio stations use quotations as well as "spot" information.

Principal grain reports of the service are distributed from Minneapolis on rye, barley, flax, oats, and spring wheat; Chicago on wheat, corn, and oats; Kansas City, Mo., on winter wheat, oats, grain sorghums, and barley; San Francisco on wheat, barley, and flaxseed; Portland, Oreg., on wheat, feed grains (barley and oats), and corn.

A Market News report on feed is provided to feeders and others. This report includes prices of all byproduct feeds, information about their supply and distribution, the location of supply, and the areas of greatest demand. Commercial correspondents and OMS field offices furnish information on the prices of byproduct feeds, such as wheat mill feeds, cottonseed meal, and soybean cake.

The service provides information on the cost of representative dairy and poultry rations in important feeding areas. Another development is a feed price index that indicates the level of feed prices from week to week. Another special service is market news on rice, issued from Washington, D. C., and San Francisco.

The service on hay is especially important to growers and shippers. Hay information is collected and disseminated from Kansas City, Mo., Portland, Oreg., and Los Angeles. In southern California, news on hay is reported daily.

The service also supplies market information on beans in California, and on hops in California, Oregon, and Washington.

#### Livestock, Meats, and Wool

Market News about livestock, meats, and wool began in 1916 with the collection and dissemination of information on current supplies and prices of meats and the demand for these products. In 1918, the service was extended to include market conditions and prices on livestock at several midwestern markets. In 1924, it was further expanded to include information on trading in wool at Boston, the largest wool-marketing center in the country. Since then, additional offices have been opened at other livestock markets and in producing areas.

The Market News day in livestock begins around 6 a. m. in most markets. At this hour each major office gets together a report on livestock receipts. This is exchanged by direct wire connections so that within a few minutes each major market knows the estimated supply situation at all markets.

Shortly after 8 o'clock the reporters start their rounds of the market to interview buyers, shippers, and commission men. Usually the first report is an early flash on the hog market, followed by a flash on cattle and sheep markets. The series of reports for the day includes the complete information on supply, price trends, detailed quotations of the day's sales, and the estimated receipts for the following day.

Not every one of the livestock market news offices follows exactly this pattern, because the services provided are designed to meet local market needs and methods of operations, and yet be sufficiently uniform to be usable and understandable in all livestock-producing and marketing centers.



The service has been gradually expanded to meet the need of the industry, and market news on livestock is now collected and disseminated from 29 public markets, and from several large producing areas where direct trading is especially important and has considerable influence on price trends. The 29 public markets covered by the service are located at Baltimore, Billings, Mont., Chicago, Cincinnati, Denver, Detroit, Ft. Worth, Houston, Indianapolis, Jersey City (New York office), Kansas City, Los Angeles, Louisville, Montgomery, Nashville, National Stockyards (East St. Louis, Ill.), New York, North Portland (Oreg.), North Salt Lake City (Ogden office), Ogden, Oklahoma City, Omaha, Peoria, San Antonio, San Francisco, Sioux City, South St. Joseph, South St. Paul, and Wichita.

### Tobacco

The furnishing of daily and weekly price reports on tobacco according to U. S. grade is an essential companion activity to the tobacco inspection service. Knowledge of the grade of his tobacco is of little value to the grower unless he is provided simultaneously with information on the average selling prices of the various grades.

With specific information on grade and on current selling prices, the grower can arrive at the approximate value of his tobacco and decide whether the auction bid price is fair and reasonable in the light of existing market conditions. When the bid price is substantially lower than the current average for the grade, the farmer may immediately reject the sale and demand a resale. Auction sales of tobacco are at the rate of 300 to 500--and often 600--lots per hour. So errors of judgment leading to unreasonably low prices are numerous.

To make price information available, OMS men follow the sale and record required data from the basket tickets. These tickets contain all the information essential for price reports--the grade, number of pounds, and price. Records are obtained from the different markets that sell the same type of tobacco, and they are combined and compiled in field offices for the publication of mimeographed daily and weekly reports covering each type area. These reports are furnished to growers on the auction floors and further disseminated by press and radio. In addition, season market reviews covering the types of tobacco sold at auction are issued. These reviews include average prices for each grade, average prices for the markets, the total quantity sold on each market, statistics to show the percentage distribution of the crop according to quality factors, and other related market information.

The two principal Market News offices, at Louisville, Ky., and Raleigh, N. C., are supplemented by temporary Market News offices set up at other points as needed during the marketing seasons for the various types.

## PARTIAL SUSPENSION OF TEA RESTRICTIONS CONTINUES

Partial suspension of War Food Order 18.3 (the order restricting tea packaging and distribution) has been extended by WFA to cover the third quarter, through next September 30.

The extension is covered in amendment 2 to partial suspension of the order which has been in effect since January 1945, and which removes all order limitations except reporting and record-keeping requirements. Packers are still required to file quarterly report form FDO 18-1 covering their stocks and deliveries of tea.



## SUGAR DISTRIBUTION ORDER ISSUED

WFA in mid-June announced the issuance of War Food Order 131 providing for control of distribution of sugar by cane sugar refiners, beet sugar processors, importers of direct-consumption sugar, and mainland direct-consumption cane sugar producers. The order was issued to limit sugar distribution to the quantities allocated during the period of shortest supply and maximum demand.

Under the order the Director of Marketing Services is authorized to fix distribution quotas for all primary distributors of sugar, as assurance that the distribution of sugar will be consistent with the allocations made by the War Food Administration to all claimants against the U. S. sugar supply. Such quotas will control the release of sugar by primary distributors. Sugar allocated for civilian use will continue to be distributed through the rationing regulations of the Office of Price Administration.

In accordance with the sugar allocations announced at the same time by the War Food Administrator and under the authority of WFO 131, the Director of Marketing Services announced the issuance of WFO 131.1 establishing distribution quotas for primary distributors of sugar for the period April 1 to September 30, 1945. Under this order, the total quantity of sugar for distribution in continental United States is divided among all primary distributors, and each distributor has a separate quota covering each of the following types of sales:

- (1) To the War Food Administration (through Office of Supply, CCC)
- (2) To Government agencies other than WFA and WSA (through United States Army Quartermaster Corps procurement)
- (3) To authorized purchasers (including Government food contractors, chandlers, and jobbers for WSA ship supplies, and commercial exporters)
- (4) To U. S. civilians



## WARTIME DEVELOPMENTS IN COTTON TO FIND PEACETIME APPLICATIONS

Wartime research projects on cotton at the Southern Regional Research Laboratory have resulted in developments that will find important peacetime applications, according to officials of the U. S. Department of Agriculture's research administration.

Among the results of research to develop an improved cotton tire cord are a cord with improved heat resistance, and another with greater tensile strength than is obtained with present commercial cotton tire cords processes. The investigators declare without qualification that cotton cords can be manufactured which are definitely superior to the types of commercial cotton cords now being produced, and further improvements can be expected as more information is obtained and applied.

Another wartime development at the laboratory that will find important peacetime uses is a process for rotproofing cotton goods that is more effective than any other known treatment. Cloth samples treated by the new process have retained more than 80 percent of their strength after burial for an entire year in a damp, warm soil known to be rich in organisms that cause rotting. In contrast, untreated goods placed in the same soil rotted to pieces in about a week.

The investigators at the southern laboratory have also developed a flameproofing treatment for cotton fabrics that has definite advantages. Although effective treatments have been available for a number of years, usually they have made the fabric too stiff and heavy or they washed out too readily. Fabric treated by the new process retains its flame resistance after many launderings, yet its physical characteristics are changed but little. The process makes flameproofing of outer garments more practicable.

Still other recent discoveries of the New Orleans laboratory are a resinous treatment that increases by many times the life of cotton fishnets, a specially treated cotton thread that will resist deterioration resulting from presence of acid in fertilizer bags, and a new type of semielastic all-cotton bandage. The latter, announced earlier in the war, had undergone extensive hospital trials and has been declared by medical men to be superior to ordinary gauze, particularly for elbow, knee, and head dressings.



Under War Food Order 29, WFA is continuing through next September 30 the suspension of restrictions on delivery of crude cottonseed, peanut, soybean, and corn oils to refiners for refining purposes. Authorizations for delivery of the four crude oils to all other users, however, will continue to be obtained from WFA.

# *The Wartime Dairy Program*

. . . . By Tom G. Stitts,  
Chief, Dairy and Poultry Branch

First consideration in planning the wartime dairy program has been given to increasing the supply of dairy products available for human consumption, without too much disruption of the dairy industry and without creating too many postwar problems.

The total supply of dairy products available for human consumption has been increased in three ways during the war years:

1. By increasing the production of milk on farms from 109½ billion pounds in 1940 to a level that is expected to exceed 120 billion in 1945.
2. By farmers selling a larger proportion of their total production as whole milk rather than as farm-separated cream--thus increasing our commercial whole-milk supply from 47 billion pounds in 1940 to 64½ billion in 1944.
3. By producing nonfat dry milk solids for human consumption from skim milk that was formerly used for animal feed dry skim milk and for casein--close to 3 billion pounds of skim milk being diverted in this way from nonfood to food use between 1940 and 1944.

Rapid increases in milk production, such as can be made with hogs and poultry, are impossible. There always has been, however, a large potential supply of human food on farms in the skim milk fed to hogs and poultry. This was rapidly made available for human consumption.

This shift was extremely significant because the nonfat milk solids in milk (about 8.7 pounds per hundredweight of milk) contain the milk proteins, the milk sugar, and certain minerals and water-soluble vitamins. The nonfat milk solids are an important source of the calcium needed for sound bones and teeth. The nonfat milk solids, also, contain a supply of phosphorus and water-soluble vitamins such as riboflavin, thiamine, and niacin. Prior to this shift, while most of the nutritionally valuable fats and fat-soluble vitamins in milk were being used for human consumption, much of the nutrients of the nonfat milk solids were not being used.

These nonfat milk solids could be made available in a number of ways of which the following are important and result in products that



are needed for military and lend-lease purposes. These ways also utilize the butterfat and fat-soluble vitamins in milk.

1. Nonfat dry milk solids (with the fat used for butter or cream)
2. Evaporated milk
3. Cheddar cheese
4. Fluid milk

Historically the butter industry of this country has been based on farm-separated cream than on whole milk. In order to utilize the skim milk available from butter making, a facilities program was initiated and over 200 plants were built. Practically all of the plants were for the production of nonfat dry milk solids and this made possible a greater utilization of the nonfat milk solids in connection with butter making.

Fortunately for the wartime dairy program there was a great deal of unused processing and distributing capacity for evaporated milk, Cheddar cheese, and fluid milk. Had it not been for this capacity it would have been impossible to handle the additional 17 billion pounds of whole milk delivered to plants and dealers in 1944 as compared with 1940. The 17 billion pounds was an increase of 37 percent over 1940 whole milk deliveries and resulted from the larger 1944 milk production and the greater proportion of that production sold as whole milk rather than as farm-separated cream.

This very substantial increase in whole milk deliveries by farmers, combined with the processing capacity that was fortunately available, the ingenuity of management, and the long hours of work by plant labor, has made possible extraordinary increases in the production of Cheddar cheese and evaporated milk. Estimated production of Cheddar cheese in 1945 will be 850 to 900 million pounds as compared with 600 million pounds in 1940. Production of evaporated milk in 1945 will be close to 90 million cases, whereas it was only 56½ million cases in 1940.

#### Demand

Even with these extraordinary increases in production, military and lend-lease requirements for these products have been so great that substantial decreases below prewar levels in civilian supplies have been unavoidable. Military demands to meet the extreme conditions of the Pacific area have called for even more extraordinary increases in the production of certain whole milk products. Dry whole milk powder production which never reached 30 million pounds before 1941 will approximate 225 million pounds during 1945, a sevenfold increase. It is anticipated that more than three-fourths of 1945 production will go to the war services.

The armed forces are requesting a production of 150 million pounds of dry ice cream mix during 1945 as compared with a negligible prewar production. The increase production of 195 million pounds of dry whole milk and 150 million pounds of dry ice cream mix will require an amount of butterfat sufficient to make 110 million pounds of butter.

These changes in the utilization of manufacturing milk were necessary to meet war service needs and maintain a minimum civilian supply--especially of evaporated milk.

In addition to these changes, per capita consumption of fluid milk has increased 20 to 25 percent during the last 5 years in this country. The greater utilization of milk in fluid form by civilians has been an important factor in the civilian diet during the war years. Principally as a result of the heavy fluid milk consumption, supplies of protein are 10 percent above prewar, and of calcium 20 percent. About half of the calcium of the average civilian diet in 1945, 15 percent of the protein, and 30 percent of the riboflavin, will come from fluid milk and cream.

While these extraordinary changes in milk utilization will create some postwar problems they were necessary in order to increase the supply of dairy products available for human consumption, to meet war needs, and to utilize existing processing capacity. An effort has been made to keep changes in the dairy industry to a minimum consistent with the objective of maximum food production.

The principal device used has been limitation orders restricting the production of dairy products not wanted by the military services, not widely consumed by the civilian population, or the consumption of which fluctuates widely with depression and prosperity. War Food Orders 92 and 93 are examples of the first category. These orders are designed to prevent shifts away from types of cheese and dried milk required by the war services to other types. WFO 13 prohibits the sale of heavy cream to help maintain butter production which is more widely consumed. WFO's 8 and 79 limit the sales of ice cream and fluid milk and cream, the consumption of which tends to increase in periods of prosperity. These orders were designed to maintain as nearly a normal utilization of milk as was consistent with obtaining maximum food production and utilization.

Many of the changes in milk utilization that have been required by war needs will not be permanent. Careful consideration should be given to reconversion to peace conditions as soon as the requirements of war permit.



WFA has amended WFO 22.9 to increase the total set-aside of canned peas from 40 to 43 percent. The increased set-aside, made necessary by greater needs of the armed services, became effective June 14, 1945.



## RESTRICTIONS ON GLYCERINE INVENTORIES

WFA has issued WFO 134, restricting the inventories of glycerine users to a 30-day supply and of glycerine distributors to a 20-day supply, effective June 21, 1945.

The order is expected to help producers and refiners rebuild their stocks so that they may readily meet any emergency or sudden war demand. Although total U. S. stocks of glycerine are above the minimum levels considered necessary to avoid restrictions on use, producers' and refiners' stocks are at a low level. Since military demands for glycerine are supplied by this latter group, the WFA action was taken to assure adequate producers' and refiners' stocks.



## WFO 69 REVISED

WFA has further amended WFO 69, removing dates, pineapples, prunes, and gooseberries from the list of fruits and berries restricted in the production of alcoholic products. Still remaining under the provisions of the order are 19 fruits and berries. Restrictions on the use of "vinegar stock" also were removed.

Also issued was a new Director's Order, WFO 69.3, replacing WFO 69.1, as amended, and WFO 69.2, as amended. The new Director's Order continues to permit the use of any apricots, plums, pears, and peaches below their U. S. No. 2 grades and of any apples below U. S. Utility grade in the production for sale of any product containing 7 percent, or more, of alcohol, by volume, provided the fruits to be so released have been culled from a larger lot or larger lots of fruit sorted for market in fresh form or for processing. In addition, all clingstone peaches grown in California are released under the general authorization.



## WFA ISSUES CORN CONTROL ORDER

A WFA order restricting the distribution or use of corn for the manufacture of alcohol or in alcohol for export, as a measure to assure essential corn supplies for feed mixers and industrial processors, became effective June 16.

The order (WFO 132) prohibits the sale of corn to a distiller, or the purchase of corn by a distiller or by an exporter. It also prohibits use of previously acquired corn in the manufacture of alcohol or in alcohol for export, unless the corn is acquired under contracts entered into before June 11, 1945.

## BACON REQUIREMENTS CHANGED

Reflecting changes in requirements of the armed forces, WFA has issued an amendment to WFO 75.3a which provides for the production of more of the type of bacon which will stand overseas shipment under severe climatic conditions. The amendment does not change the percentage or amount of bacon presently available for civilian consumption.

Under the amendment provisions the armed forces, from the total bacon now available to them, will obtain 35 percent (instead of 30 percent) with a 96-hour smoke. Bacon with a 48-hour smoke will be increased from 10 to 20 percent of the supplies previously allocated for armed forces use.

In general, bacon with a longer number of hours of smoke is better able to withstand severe storage and climate conditions--particularly hot weather.



## SUGAR ENTRIES FROM OFFSHORE AREAS

WFA has announced that the quantity of sugar entered for consumption from all offshore areas during January-May amounted to 2,460,792 short tons, raw value. For the corresponding period last year the quantity entered totaled 2,253,691 tons. The figures are subject to change after final outturn weights and polarization data for all entries are available.

A total of 128,522 short tons of sugar, raw value, was marketed by the mainland cane area and 301,239 tons by the continental beet area during January-April as compared with 192,960 tons and 322,983 tons, respectively, during the same period of 1944.



## LAMB SET-ASIDE REDUCED

Civilians will receive 5 percent more of the total production of federally inspected lamb of the three top grades, as a result of an amendment to WFO 75.5. Effective June 10, the amendment reduces the quantity of lamb which must be set aside by federally inspected packers for the armed forces from 25 to 20 percent of present production of AA, A, and B dressed carcasses weighing 30 to 70 pounds.

The increase in civilian supplies was possible because WFO 75.5 was producing more lamb than the current allocation for the armed forces. The amendment carries no limiting period--but is subject to change if conditions warrant.



# 28-Hour Law

. . . . By Charles R. Barnett, Chief, 28-Hour  
Enforcement Section, Transportation Rates and  
Services Division, Marketing Facilities Branch

What does 28 hours mean in the life of an animal destined to become beefsteak or pork chops? Not much, perhaps, in the ordinary course of events. But when the 28 hours in question happens to be the period the animal must spend in a crowded, market-bound railroad car without rest, feed, or water, it's pretty important to the animal. Important to the owner, too, when we consider what can happen to weight and other market factors when an animal is deprived too long of these basic requirements of life. And--particularly today when meat is hard to find--it's important to the public generally.

## 28 . . . and UP

The fact is, the animal is lucky if he is confined *only* 28 hours. Because the so-called 28-Hour Law, which requires the unloading for rest, feed, and water of animals in interstate transit, does not limit confinement to 28 hours. If the owner or person in charge of the shipment desires, he may extend the period to 36 hours. As a matter of practice, most shipments are confined between 30 and 36 hours. When confinement is longer than 36 hours--it often is--the carrier is liable to a penalty of \$100 to \$500, unless a storm or an accident impossible to anticipate or avoid by "due diligence and foresight" was the cause of the unloading delay.

One of the oldest regulatory laws administered by the Department of Agriculture, the 28-Hour Law has been on the statute books longer than any other Federal law applicable to the transportation of livestock now in force. It was passed first in 1873. In 1906 certain defects led to the passage of the present statute.

It has two purposes--to prevent cruelty to animals while in transit and to protect the interests of their owners and of the public generally by preventing the loss of livestock and meat.

The act provides for unloading of the livestock in a humane manner into properly equipped pens for a rest period of at least five consecutive hours. While unloaded, the stock must be properly fed and watered. To meet the requirements the railroads maintain feeding stations at suitable points or arrange to use the facilities of privately owned stockyards. Pens must have facilities for safe unloading and adequate feeding and watering. They must be large enough and built to provide

the animals with a resting place. There must be enough suitable feed to satisfy hunger and an ample supply of clean water.

The act covers railroads, express companies, car companies, and other common carriers "whose roads form any part of a line of road" over which livestock is moved from one State into or through another State. It also applies to owners or masters of ships and other vessels, but it is seldom that vessels and any land carriers except railroads have been involved in violations. The act has been construed as not applicable to motor trucks and similar highway vehicles, for the reason that they do not operate over a line of road in the same sense as do the land carriers specifically mentioned in the act.

The 28-Hour Law provides that a carrier is not liable if a cause beyond its control prevents compliance. This provision has always been interpreted broadly, and in cases where investigation has disclosed such a reason for noncompliance, there has been no prosecution. Nevertheless, many factors must be considered in determining the carrier's liability, and controversial issues frequently have been taken to court. In fact, considering the limited scope of the law, an unusually large number of cases have gone to the higher courts, the Supreme Court having determined the point at issue on three occasions since the passage of the present statute.

#### Wartime Administration

During the war years the burden under which the carriers have been operating has been taken into consideration in the administration of the act, and action has been withheld in many cases which, had they occurred before the war, would have received attention. As a result of this policy, action has been withheld in approximately 45 percent of reported violations as compared with approximately 25 percent before the war. (Perhaps it should be noted, however, that the number of reported violations has increased more than tenfold since 1940, when only 100 cases were recommended for prosecution. During the first 10 months of the present fiscal year--July 1944 through April 1945--action has been recommended in 585 cases.)

The field work of administering the act is done on a part-time, cooperative basis by Department of Agriculture employees engaged in other work at public stockyards and meat-packing centers. Here railroad and stockyard records of livestock shipments destined to or passing through these points are checked for compliance.

Expenditures authorized for enforcement of the 28-Hour Law have never exceeded \$30,000 annually. For the coming fiscal year the allotment is \$25,795. Receipts from court penalties, which are covered into the general funds of the U. S. Treasury, amounted to more than \$53,000 in each of the fiscal years 1943 and 1944. During the 10 months July 1944 through April 1945 they ran to \$64,300.



## ABOUT MARKETING:

The following reports, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach, and mail to the Office of Marketing Services, U. S. Department of Agriculture, Washington 25, D. C.

Reducing Damage to Eggs and Egg Cases. MP-564. May 1945. 24pp. (printed)

Postwar Readjustments in Processing and Marketing Dehydrated Fruits and Vegetables. May 1945. 99pp. (mimeographed)

Light Air-Cured Tobacco Market Review, 1944-45 Season. June 1945. 34pp. (mimeographed)

Results of Fiber and Combed Yarn Spinning Tests of Some Long Staple Cottons Grown in the United States, Crops of 1941-44. June 1945. 19pp. (multilithed)

Dairy and Poultry Market Statistics, 1944. CS-13. April 1945. 62pp. (printed)

Fruits (13 Noncitrus) Production and Utilization, 1934-44. (Bureau of Agricultural Economics) June 1945. 22pp. (mimeographed)

Farm Production, Farm Disposition, and Value of Principal Crops, 1943-44. (Bureau of Agricultural Economics) May 1945. 61pp. (mimeographed)

Tentative United States Standards for Grades of Frozen Apricots. June 1945. 9pp. (mimeographed)

Tentative United States Standards for Grades of Frozen Peaches. June 1945. 9pp. (mimeographed)

Statistics of Grains. SAS 84. (Bureau of Agricultural Economics) 62pp. (printed)

Statistics of Cotton, Sugar, and Tobacco. SAS 85. (Bureau of Agricultural Economics) 49pp. (printed)

Statistics of Oilseeds, Fats, and Oils. SAS 86. (Bureau of Agricultural Economics) 31pp. (printed)

Dairy and Poultry Statistics. SAS 90. (Bureau of Agricultural Economics) 61pp. (printed)

Statistics of Beef Cattle, Hogs, Sheep, Horses, and Mules. SAS 89. (Bureau of Agricultural Economics) 51pp. (printed)

